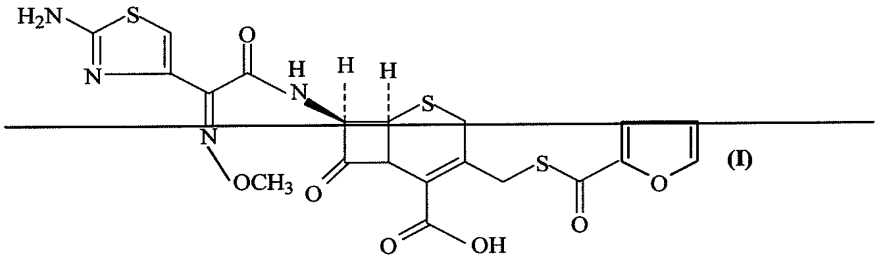
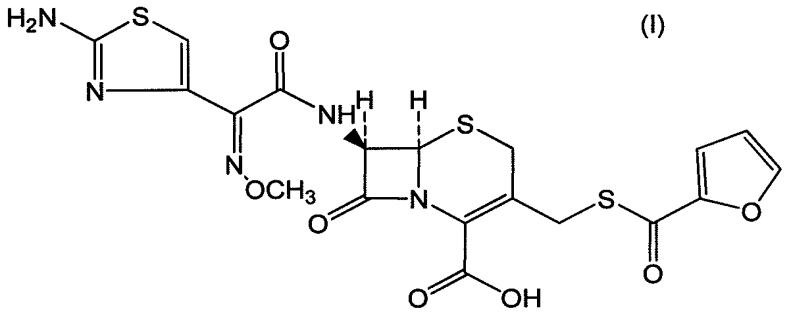
The listing of claims presented below replaces all prior versions and listing of claims in the application.

Listing of claims:

1. (Currently Amended) A process for preparation of ceftiofur of formula (I) of a ~~high~~ purity greater than 97% ~~and substantially free of impurities comprising,~~



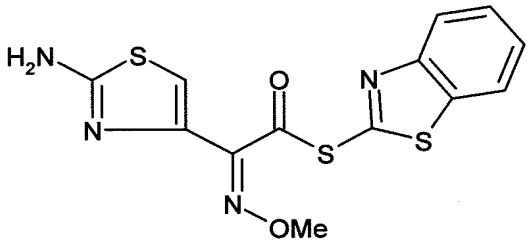
(I)



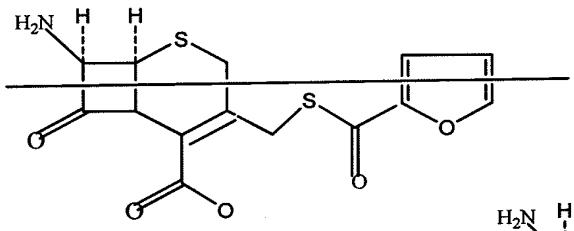
(I)

comprising the steps of: reacting [2-(2-aminothiazol-4-yl)]-2-syn-methoxyimino acetic acid-2-benzothiazolyl thioester of formula (II),

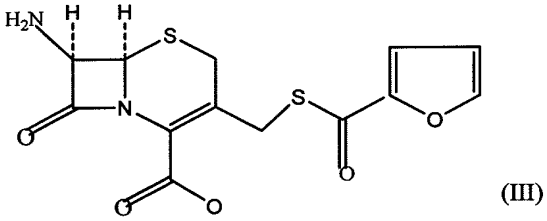
(II)



with 7-amino-3-(2-furanylcarbonylthiomethyl)-3-cephem-4-carboxylic acid of formula (III)



(III)



(III)

in the presence of a mixture of an water-immiscible inert organic solvent and water and in the presence of a organic base and isolating ceftiofur of formula (I) of a purity greater than 97% ~~substantially free of impurities~~ by,

a) adding water to the reaction mixture and selectively partitioning the impurities in the organic phase and ceftiofur (I) in the form of a salt with the base in the aqueous phase,

b) acidifying the aqueous phase containing ceftiofur (I) in the form of a salt with the base in the presence of a mixture containing a water-miscible and a water-immiscible organic solvent and in the presence of a saturated aqueous solution of an alkali or alkaline earth containing salt, to partition ceftiofur (I) in the organic phase, and

c) isolating ceftiofur (I) of a ~~high~~ purity greater than 97% ~~and substantially free of impurities~~ by evaporation of the organic solvent or precipitation by addition of ~~a co-solvent~~ an anti-solvent.

2. (Currently Amended) ~~A~~ The process according to claim 1, wherein the water-immiscible inert organic solvent comprises a chlorinated solvent.

3. (Currently Amended) ~~A~~ The process according to claim 2, wherein said chlorinated solvent is selected from dichloromethane, 1,2-dichloroethane, and chloroform.

4. (Currently Amended) ~~A~~ The process according to claim 1, wherein the organic base is selected from triethyl amine, N-methyl morpholine, tert-butyl amine, dicyclohexyl amine, tri-n-butylamine, N-methyl pyrrolidinone and 2,3-dimethylamino pyridine.

5. (Currently Amended) ~~A~~ The A process according to claim ~~3~~ 4, wherein the base is employed in molar proportion of 1.0 to 3.0 moles per mole of the compound of formula (III).

6. (Currently Amended) ~~A~~ The process according to claim 1, wherein the compound of formula (II) is employed in molar proportion of 1.0 to 2.0 moles per mole of the compound of formula (III).

7. (Currently Amended) ~~A~~ The process according to claim 1, wherein the ratio of the water-immiscible inert organic solvent ~~and~~ to water is between 90: 10 and 98: 2.0.

8. (Currently Amended) ~~A~~ The process according to claim 7, wherein the ratio of the water-immiscible inert organic solvent ~~and~~ to water is ~~preferably~~ between 95: 5.0 and 97.5: 2.5.

9. (Currently Amended) ~~A~~ The process according to claim 1, wherein the temperature at which the reaction is carried out is between 0 and 30°C.

10. (Currently Amended) ~~A~~ The process according to claim 1, wherein the water-immiscible solvent is a chlorinated solvent or C_{1-6} alkyl acetate.

11. (Currently Amended) ~~A~~ The process according to claim 10, wherein the chlorinated inert organic solvent is selected from dichloromethane, dichloroethane and chloroform and the

C_{1-6} alkyl acetate is selected from ethyl acetate, butyl acetate, n-propyl acetate, isopropyl acetate and tert-butyl acetate.

12. (Currently Amended) ~~A~~ The process according to claim 1, wherein the acid employed ~~for adjusting the pH~~ is a mineral acid selected from orthophosphoric acid, hydrochloric acid and[[,]] sulphuric acid.

13 . (Currently Amended) ~~A~~ The process according to claim 1, wherein the pH of the reaction in step (b) is 3.0 ± 0.1.

14. (Currently Amended) ~~A~~ The process according to claim 1, wherein the water-miscible organic solvent is selected from a ketonic solvent and a nitrile.

15. . (Currently Amended) ~~A~~ The process according to claim 1, wherein the water-miscible organic solvent is a nitrile selected from acetonitrile, propionitrile and butyronitrile.

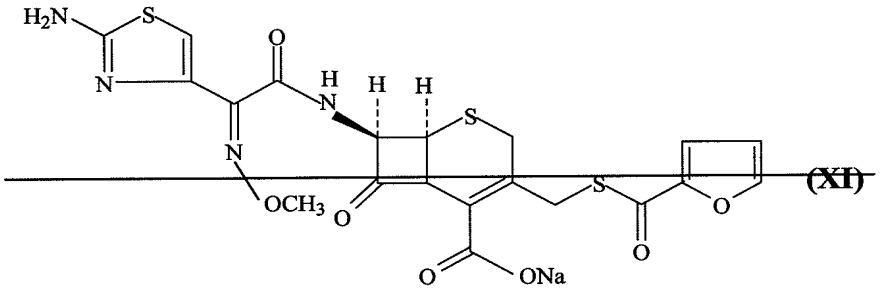
16. (Currently Amended) ~~A~~ The process according to claim 1, wherein the water immiscible solvent is selected from ~~chlorinated solvents like~~ dichloromethane, dichloroethane, chloroform, ~~or C_{1-6} alkyl acetates like~~ ethyl acetate, n-butyl acetate[[,]] and isopropyl acetate.

17. (Currently Amended) ~~A~~ The process according to claim 1, wherein the alkali or an alkaline earth metal containing salt is selected from sodium chloride, potassium chloride, sodium sulphate, potassium sulphate, and calcium chloride.

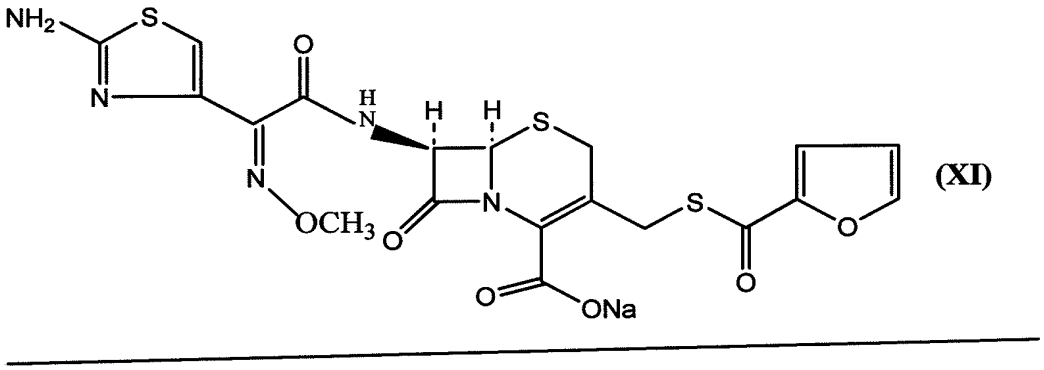
18. (Currently Amended) ~~A~~ The process according to claim 1, wherein the anti-solvent ~~co-solvent~~ is selected from an aromatic hydrocarbon and an aliphatic hydrocarbon.

19. (Currently Amended) ~~A~~ The process according to claim 18, wherein the aromatic hydrocarbon is selected from toluene and[[,]] xylene, and the aliphatic hydrocarbon is selected from cyclohexane, n-hexane and heptane.

20. (Withdrawn / Currently Amended) A process for making the ceftiofur sodium of formula (XI) of high purity, stability and substantially free from impurities, ~~comprising,~~

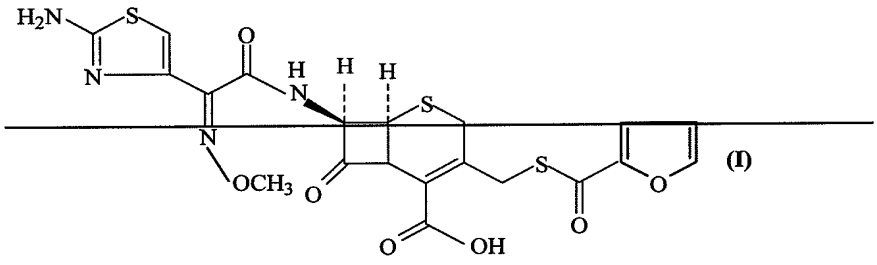


~~(XI)~~

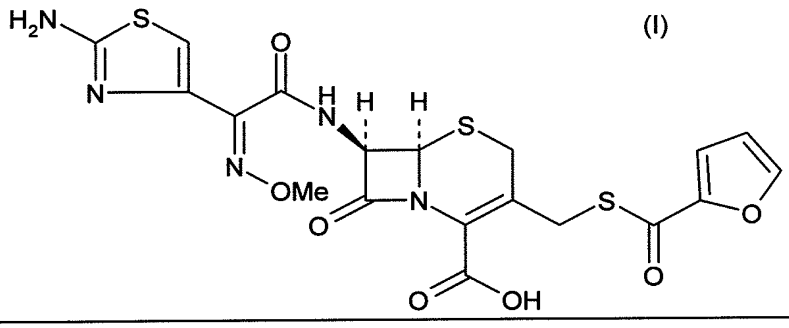


(XI)

~~reactiing~~ comprising the steps of: reacting ceftiofur of formula [[(]](I),



(I)



(I)

with sodium-2-ethyl hexanoate in an aqueous mixture of water miscible organic solvents and in the presence of an organic base.